GP CLINIC
LIFE ACCESSIBLE | CONVENIENT | EASY

Laboratory Investigation Report

Name	:	Mr ARTEM KORLIAKOV	**Order On:**	:	20-02-2025 14:14
Age/Gender	:	26 Y/M	**Collected On:**	:	20-02-2025 14:14
MR No	:	MRN000000326142	**Received On**	:	20/02/2025 16:27
Visit No	:	6006OP000021222	**Reported On**	:	20-02-2025 19:51
Referring centre	:	Life Express Clinic Pearl	**Lab ID No:**	:	SER001740914
Referred By	:	Dr. Pooja Marianne Abraham			
Doctor Name	:				

SER001740914

BIOCHEMISTRY

Test Description	Results	Units	Reference Range	Methodology
HEPATIC FUNCTION PANEL				
Globulin, Serum	3.1	g/dL	2.0-3.5	Calculation
Total Bilirubin	1.2	mg/dl	0.1-1.2	Diazotization
Direct Bilirubin	**0.5 H**	mg/dL	<0.3	Diazotization
Indirect Bilirubin	0.7	mg/dL	0-0.9	Calculation
Alanine Transaminase (ALT/SGPT)	14.7	IU/L	<50	UV with P5P (IFCC)
Aspartate Aminotransaminase (AST/SGOT)	15.8	IU/L	<50	Tris buffer UV with P5P
Protein, Total	7.7	g/dL	6.6-8.7	Biuret method
Albumin, Serum	4.6	g/dL	3.5-5.3	Bromocresol Green
Alkaline Phosphatase (ALP)	51.5	IU/L	30 -120	AMP optimized to IFCC
Gamma Glutamyl Transferase (GGT)	6.4	U/L	<49	Enzymatic,colorimetric
Specimen Type: SERUM				
BASIC RENAL TESTS				
Urea	30.7	mg/dl	16.6-48.5	Urease-GLDH,UV
Uric Acid	**8.2 H**	mg/dl	3.4-7.0	uricase peroxidase
Creatinine	0.9	mg/dl	0.7-1.2	Sarcosine oxidase
BUN	14.35	mg/dL		Calculation
BUN/Creatinine	15.94	%	10-20	Calculation
Specimen Type: SERUM				

HEMOGLOBIN GLYCOSYLATED A1C

HBA1C	5.0	%	Kindly refer interpretation below.	Turbidimetric inhibition Immunoassay
eAG(estimated average glucose)	96.8	mg/dL		Calculation

Specimen Type: EDTA WHOLE BLOOD

Clinical Interpretation:

Interpretation:

As per American Diabetes Association(ADA)	
Reference group	**HbA1c in %**
Non diabetic adult >=18 years	4.0-5.6
At risk (prediabetes)	5.7-6.4
Diagnosing Diabetes	>=6.5
Therapeutic goals for glycemic control	<7.0

Comments

HbA1C reflects average glycaemia over approximately 3 months, the test is the major tool for assessing glycemic control and has strong predictive value for diabetes complications. Thus, HbA1C testing should be performed routinely in all patients with diabetes- at initial assessment and as part of continuing care. The frequency of A1C testing should depend on the clinical situation, the treatment regimen, and the clinician's judgment.

ADA Recommendations for HbA1C testing

1. Perform the A1C test at least two times a year in patients who are meeting treatment goals (and who have stable glycemic control)
2. Perform the A1C test quarterly in patients whose therapy has changed or who are not meeting glycemic goals.

Factors that interfere with HbA1C measurement: Hemoglobin variants, elevated fetal hemoglobin (HbF) and chemically modified derivatives of hemoglobin can affect the accuracy of HbA1C measurements.

Factors that affect interpretation of HbA1C results: Any condition that has shortens erythrocyte survival or decreases mean erythrocyte age (e.g. recovery from acute blood loss, hemolytic anemia, HbSS, HbCC and HbSC) with falsely lower HbA1C test results regardless of the assay method used. Iron deficiency anemia is associated with higher HbA1C.

GLUCOSE QUANTITATIVE BLOOD XCPT REAGENT STRIP

Fasting Blood Sugar (FBS)	86.9	mg/dl	70-99	Hexokinase

Specimen Type: FLUORIDE

LIPID PANEL

Cholesterol (Total)	182.0	mg/dl	<200	Enzymatic,colorimetric
HDL	40.2	mg/dl	>35	Enzymatic,colorimetric
NONHDL	**141.8 H**	mg/dl	<130	Calculation
LDL	**115.0 H**	mg/dl	<100	Enzymatic,colorimetric
Triglyceride	89.1	mg/dl	<150	Enzymatic,colorimetric
VLDL	17.82	mg/dl	<30	Calculation
Total Cholesterol/HDL Ratio	**4.53 H**		<4.5	Calculation
LDL/HDL Ratio	2.86		<3.5	Calculation

Specimen Type: SERUM

Clinical Interpretation:

Adults : >17 years of age

REMARKS	TOTAL CHOLESTROL in mg/dl	TRIGLYCERIDE in mg/dl	LDL CHOLESTROL in mg/dl	NON HDL CHOLESTROL in mg/dl
Optimal	<200	<150	<100	<130
Above Optimal	-	-	100-129	130-159
Borderline High	200-239	150-199	130-159	160-189
High	>=240	200-499	160-189	190-219
Very High	-	>=500	>=190	>=220

Children: 2-17 years

Remarks	Total Cholesterol	Triglycerides		LDL cholesterol
		(2-9 years)	(10-17 years)	
Acceptable	<170	<75	<90	<110
Borderline High	170-199	75-99	90-129	110-129
High	>or = 200	>or = 100	>or= 130	>or =130

Note: Source: Mayo clinic Laboratories

1. Measurement in the same patient can show physiological and analytical variations. Three serial samples 1 week apart are recommended for total cholesterol, Triglycerides, HDL and LDL cholesterol.
2. NLA-2014 recommends a complete lipoprotein profile as the initial step for evaluating cholesterol.
3. Friedewald equation to calculate LDL cholesterol is most accurate when Triglyceride level is <400 mg/dl. Measurement of Direct LDL cholesterol is recommended when Triglyceride level is >400 mg/dl.
4. NLA-2014 identifies Non HDL cholesterol (an indicator of all atherogenic lipoproteins such as LDL, VLDL, IDL, Lp(a) , Chylomicron remnants)along with LDL cholesterol as a co primary target for cholesterol lowering therapy.
5. Additional testing for Apolipoprotein B, hsCRP, Lp(a) and LP-PLA2 should be considered among patient with moderate risk for ASCVD for risk refinement.

C-REACTIVE PROTEIN

C-Reactive Protein	0.6	mg/L	<5.0 Source: Roche Tina-quant C-Reactive Protein IV kit insert	Particle -enhanced immunoturbidimetric assay

Specimen Type: SERUM

CALCIUM TOTAL

Calcium Total	9.5	mg/dL	8.6-10.0 Source: Roche Calcium Gen.2 kit insert	5nitro5methylBAPTA

Specimen Type: SERUM

Fathima Abdul Vahab
Lab Technologist
11601

Verified By:
Dr. Sunita Nain
M.D. PATHOLOGY
Specialist Clinical Pathology
DHA-P-62700059

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IMPORTANT INSTRUCTIONS

• Above test results pertain to the sample received, results should be clinically correlated as all test results are dependent on multiple variables and the quantity of the sample received by the laboratory • Sample repeats are accepted on request of referring Physician within 5 days post reporting • Report delivery may be delayed due to unforeseen circumstances. Inconvenience is regretted • Certain tests required further testing at additional cost. Kindly submit request within 72hrs post reporting